

**STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
OFFICE OF CONSERVATION AND COASTAL LANDS  
Honolulu, Hawaii**

180-Day Exp. Date: December 21, 2008

September 26, 2008

Board of Land and  
Natural Resources  
State of Hawaii  
Honolulu, Hawaii

**REGARDING:** Conservation District Use Application (CDUA) KA-3471 for the Renovation and After the Fact Construction of the Haena Steel Water Tank & Access Road and the Replacement of the Wainiha Booster Station

**APPLICANT:** Department of Water (DOW), County of Kauai

**AGENT:** John Sakaguchi of Wilson Okamoto Corporation

**LOCATION:** Wainiha, Hanalei, Island of Kauai

**LANDOWNER/TMKs:** The Robinsons (4) 5-8-002:003  
County of Kauai (4) 5-8-002:007

**AREA OF USE:** Approximately ( $\approx$ ) 11,500 square feet

**SUBZONE:** Limited

**BACKGROUND**

The Wainiha-Haena water system includes a below grade booster station and water tank that serves users in Wainiha Valley and along the north shore of Kauai. The existing underground booster station is a nonconforming use as it was constructed in the 1940's. The 100,000-Gallon (G) Haena steel tank and 12-foot wide, 425-foot long access road was constructed in 1977. This work was conducted within the Conservation District without authorization. This CDUA has been applied for to legalize this land use and to conduct other improvements at the noted sites.

**DESCRIPTION OF AREA AND CURRENT USE:**

The respective sites are located at Wainiha, Hanalei, Kauai within the Conservation District, Limited subzone. The Haena steel tank and connecting access road are located on privately owned land identified as TMK: (4) 5-8-002:003. The booster station is located on land owned by the County of Kauai identified as TMK: (4) 5-8-002:007. The project is located on the west side of the Wainiha Powerhouse Road upslope of the floodplain of Wainiha stream (**Exhibit 1, 2, 3 & 4**).

The lands to the south and west of the project site are privately owned and currently developed with single-family residential units. The surrounding lands to the north, directly west and east are currently undeveloped and vacant. Access to the sites is via Kuhio Highway and Wainiha Powerhouse Road. Wainiha Powerhouse Road provides the primary access route to the residences of Wainiha Valley. Electrical services are provided to the public facilities.

The Wainiha booster pump station project site is within an area that was previously cleared during construction of the existing below grade booster station. A 6-foot high chain link fence surrounds the parcel. The existing below-grade booster station, including the mechanical and instrumentation equipment is prone to groundwater and moisture damage as a result of its below-grade construction. This causes the pumps to malfunction and leaves the DOW without the means to supply water to their users. In addition, the existing electrical pump controls are located in exterior cabinets that expose the controls to the elements. A small 8' x 15' shed used by Hawaiian Telcom lies to the east side of this site.

The Haena steel tank and surrounding security fence occupy an area of 3500 ft<sup>2</sup> and is located  $\approx$  60-feet above the booster pump station at the end of a 425-ft long steep, unimproved access driveway. The tank is painted green and is  $\approx$  18' high with a 32' diameter. At the time of construction, the pad for the tank was cut into the surrounding hillside and the existing vegetation removed to provide a level base. Since that time, the surrounding trees and vegetation has re-established.

Currently, the existing unimproved access road has a 15% to 20% slope causing vehicles to slip during rainy conditions and DOW personnel must walk to the site carrying material and equipment. Vehicles are not able to access the north and west sides of the tank as the area between the present embankment and the tank are limited. This restricts maintenance activities in this area to small hand-held equipment. The limited space between the embankment and the tank also allows leaves and other vegetation to collect there and on the top of the tank that retains moisture and has caused rust spots to form.

Flora in the area is primarily introduced weedy species. Ironwood and Christmas berry trees are found at the Haena Tank site. Hawaiian Petrels or Newell Shearwaters may fly over the project site as both species are expected to be found in the back portion of Wainiha valley. It is believed that no listed, threatened or endangered species are within the project area. No native Hawaiian cultural practices or historic sites have been observed in the project area.

#### **PROPOSED USE:**

On parcel 007, an above ground booster station is proposed on undeveloped land in an area of  $\approx$  330-ft<sup>2</sup> adjacent to the existing below-grade booster pump station. The proposed booster station consists of an  $\approx$  121 ft<sup>2</sup> above-grade booster pump station, a 50-ft long 6' high concrete retaining wall adjacent to Wainiha Powerhouse Road, security fencing and related improvements. The proposed booster station will require clearing and setting the building foundation and shall be constructed of concrete masonry blocks with a concrete roof (**Exhibit 5**).

As possible, the material from the existing booster station shall be reused. Unused material shall be removed to an approved landfill. The building and roof shall be an earth tone shade to blend

into the surroundings. There is one entry with exterior lighting that shall direct the lighting to the building entry. The station will contain two new pumps, each capable of pumping water at 30Gs/minute. The booster station improvements shall not result in an increase in source capacity. Once construction of the new above-grade pump station is complete, the below grade station will be abandoned in place.

On parcel 003, improvements to the existing Haena Steel Tank includes the construction of a concrete surface on the existing 12' x 425' access road from Wainiha Powerhouse Road to the tank, a vehicular turnaround area outside of the tank access gate, a 12-foot high retaining wall and relocation of a security fence (**Exhibit 6**).

The access road improvements shall be designed to allow runoff to sheet flow across the width of the road and down the mountainside rather than function as an interceptor ditch. This design shall retain the existing sheet flow drainage pattern to Powerhouse Road.

For the turnaround area,  $\approx 90$  feet from the existing embankment shall be cut from the north and west sides of the tank. In addition,  $\approx 5$  trees (Christmas Berry & Ironwood) shall be removed. A 12-foot high retaining wall  $\approx 87$ -feet long is proposed to retain the embankment around the tank. The cut area shall be backfilled to the existing grade. The security fence is proposed to be moved from around the tank to the top of the retaining wall. Cutting the embankment and constructing the retaining wall will permit vehicles to reach the north side of the tank to conduct maintenance of the tank and related equipment.

Paving the 425-foot long steep access road would allow DOW to service and maintain the tank during all weather conditions. Removing the adjacent trees, cutting the embankment on the north and west sides of the tank and construction a retaining wall will increase the space and allow vehicular access to the entire tank perimeter. In addition, removal of the trees will reduce the amount of leaf matter falling on top of the tank.

The proposed improvements shall not require shut down of the water system. Because the Wainiha Powerhouse road is a public road, the contractor shall maintain public access for vehicles, including emergency vehicles during construction. Best Management Practices (BMPs) shall be required to prevent sediment from surface flows from entering adjacent properties or Wainiha Stream during construction. An erosion control plan shall be prepared as part of the design plans.

Upon completion of the project, DOW personnel will visit the site 3 times per week to conduct tests and maintenance of the surrounding area.

## ALTERNATIVES

The no action alternative would result in groundwater and moisture damage causing the pumps to malfunction and the DOW without the means to supply water to their users.

The use of another site would require construction of connection piping and electrical systems that would result in additional ground disturbance and increased cost to the County of Kauai and its water users.

## SUMMARY OF COMMENTS:

This Conservation District Use Application (CDUA) was referred to the following agencies for their review and comment-the State: Department of Land and Natural Resources Divisions of: Conservation & Resource Enforcement, Forestry & Wildlife, Kauai District Land Office, Historic Preservation and the Commission on Water Resource Management; the Department of Health; the Office of Hawaiian Affairs; and the Office of Environmental Quality Control. In addition, this CDUA was also sent to the County of Kauai Department of Planning and the nearest public library, the Princeville State Library to make this information readily available to those who may wish to review it. Substantive comments received are summarized below.

### DEPARTMENT OF LAND AND NATURAL RESOURCES

#### *Division of Forestry and Wildlife (DOFAW)*

DOFAW's concern is over seabird's attraction to light on Kauai. Please utilize the suggested recommended lights as described on our website regarding potential lighting effects on shearwaters, for exterior lighting requirements to the building.

#### *Applicant's response*

The suggested light fixtures set forth in the web site will be given to the design electrical engineer to be used in the design of the booster station building.

#### *Kauai District Land Office (KDLO)*

No comments

#### *Historic Preservation Division (HPD)*

We believe that "no historic properties will be affected," because residential development/urbanization has altered the land, previous grubbing/grading has altered the land and an accepted archaeological inventory survey (AIS) found no historic properties. In the event that historic resources, including human skeletal remains are identified during routine construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional disturbance, and the State Historic Preservation Division must be contacted immediately at (808) 692-8015.

#### *Applicant's response*

We note the Historic Preservation Division has determined that no historic properties will be affected by the project.

### DEPARTMENT OF HEALTH

Review all of the Standard Comments at our website. Any comments specifically applicable to this project should be adhered to.

*Applicant's response*

The final Environmental Assessment that was part of the CDUA document included Infrastructure Water System, Hazardous Waste, Water Resources, Air Quality and Noise and a list of permits required.

OFFICE OF HAWAIIAN AFFAIRS (OHA)

OHA understands the after the fact nature of this particular project centers on decades old land use changes and therefore is not necessarily the fault of the applicant. We have no objections to the proposal as described.

Should Iwi Kupuna or other cultural deposits be uncovered, work shall stop and the applicant shall contact the State Historic Preservation Division immediately.

As there may be impacts to the Hawaiian petrels and Newell's shearwaters, we suggest that all outdoor lights should be fully shaded or full cut-off styles. Upward lighting and large high-intensity floodlights located on building tops or poles should also be avoided. Use of amber colored or other color (such as blue or green) filters or bulbs should be used to assist in decreasing risk of seabird attraction. We note lighting will be used only when necessary such as emergencies or during maintenance work. The painting of buildings and other facilities should be in earth tones.

*Applicant's response*

We note OHA has no objections to the project as proposed. Should archaeological sites, artifact remains or burials be encountered, work shall cease immediately and the find shall be protected from further damage and the Historic Preservation Division shall be contacted on Kauai to assess the find.

The DLNR DOFAW has provided suggested light fixtures that will be given to the design electrical engineer to be used in the design of the booster station building. Paint colors will be part of the contract specifications.

COUNTY OF KAUAI

*Department of Planning*

The proposed project is needed to maintain public health and welfare for the residents of Wainiha. The Booster Station and Steel Tank project are public facilities to be used by a public agency for public purposes. We have no objections to the request.

*Applicant's response*

Comments noted.

**ANALYSIS:**

After reviewing the application, the Department has found by correspondence dated June 30, 2008 that:

1. The proposed use is an identified land use within the Limited Subzone of the Conservation District, pursuant to the Hawaii Administrative Rules (HAR), §13-5-22, P-6, PUBLIC PURPOSE, D-1; please be advised, however, that this finding does not constitute approval of the proposal;
2. Pursuant to Section 13-5-40, HAR, a public hearing will not be required; and
3. In conformance with Chapter 343, Hawaii Revised Statutes (HRS), as amended, and Chapter 11-200, HAR, the final Environmental Assessment (EA) and a finding of no significant impact (FONSI) to the environment was submitted to the Office of Environmental Quality Control (OEQC), and was published in the January 23, 2008 edition of OEQC's Environmental Notice.
4. The subject area is not within the Special Management Area.

**CONSERVATION CRITERIA**

The following discussion evaluates the merits of the proposed land use by applying the criteria established in Section 13-5-30, HAR.

1. *The proposed land use is consistent with the purpose of the Conservation District.*

The objective of the Conservation District is to conserve, protect and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare.

Staff notes that the proposed use is for the public benefit and is an identified land use in the subject area of the Conservation District; as such, it is subject to the regulatory process established in Chapter 183C, HRS and detailed further in Chapter 13-5, HAR. This process provides for the application of appropriate management tools to protect the relevant resources.

The after the fact and proposed improvements shall enhance the capability and reliability of the municipal water system, which will help conserve and protect the water supply. Staff notes that proper design and management of the proposed facility, by the DOW, will ensure long-term sustainability of the facility.

2. *The proposed land use is consistent with the objectives of the subzone of the land on which the use will occur.*

The objective of the Limited subzone is to limit uses where natural conditions suggest constraints on human activity. As the proposed and after the fact use are identified land

uses within the Limited subzone, Staff believes the proposed and after the fact use is consistent with the objectives of the subzone.

3. *The proposed land use complies with provisions and guidelines contained in Chapter 205A, HRS, entitled "Coastal Zone Management," where applicable.*

The project does not lie within the Special Management Area. Staff believes the project complies with the Coastal Zone Management provisions as applicable.

4. *The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region.*

Staff believes there will be minimal changes in the existing impacts on the surrounding area, community and region, as the use of the area remains the same. Outdoor lighting will be designed so as not to attract or distract birds in flight. BMPs shall be observed.

According to the application, at the time of construction of the Haena tank site in 1977, it is believed that the cut material for the tank pad was removed off site to an approved disposal site or utilized elsewhere. A site survey did not reveal any remnant areas where excess material may have been left in the area, although some of the material may have been pushed to the north of the tank. Over time, the Tank site and access road have stabilized and do not show evidence of substantial adverse impact to the resources or surrounding areas.

5. *The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.*

The existing site is currently occupied by an operating Kauai DOW facility. Because of the minimal impact on the physical and natural environment, the proposed improvements are compatible with the locality and surrounding areas. The booster station and retaining wall shall be visible from the road but should not introduce an obtrusive visual element into the general area. The intervening terrain, trees and other vegetation along Wainiha Powerhouse Road will obscure views of the steel tank.

Accordingly, Staff believes the proposed land use is, properly conditioned, appropriate to the physical conditions of the parcel.

6. *The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable.*

Activities associated with construction and installation of the proposed improvements will be short-term, and confined to the immediate vicinity. Increased intermittent traffic, noise, dust and vehicular and equipment emissions can be expected and shall be controlled. The proposed replacement booster station shall be painted earth tones to blend with its surroundings.

Staff believes that the natural beauty and open space characteristics of the area will not be negatively impacted to any great extent.

7. *Subdivision of land will not be utilized to increase the intensity of land uses in the conservation district.*

No subdivision of land is proposed at this time.

8. *The proposed land use will not be materially detrimental to the public health, safety and welfare.*

No significant impacts of the proposed action have been identified. Improvement of a public water system is expected to be beneficial to the public. Accordingly, Staff believes the proposed project will not be detrimental to the public health, safety and welfare.

#### DISCUSSION:

The 100,000-G Haena steel tank and 12-foot wide, 425-foot long access road was constructed in 1977. This work was conducted within the Conservation District without authorization. As the use of the steel tank has taken place for approximately 30 years, serves a public purpose and had negligible effects to the environment, Staff recommends that this after the fact use be approved.

As the County of Kauai Department of Water's Haena steel tank exists on private land, should the County wish to acquire the site and access road by subdividing land, a Conservation District Use shall be required.

The replacement booster station, along with the Haena steel tank & proposed improvements and the subsequent operation of the system is intended to provide the public health benefit of a more reliable water supply. Staff believes the potential impacts of these actions will be overwhelmingly beneficial, and that relative to the benefits that will occur, any adverse impacts will not be substantial.

#### RECOMMENDATION

That the Board of Land and Natural Resources APPROVE the renovation and after the fact construction of the Haena steel water tank & access road and the replacement of the Wainiha booster station located at Wainiha, Hanalei, Island of Kauai, TMKs: (4) 5-8-002:003 & 007 subject to the following conditions:

1. The applicant shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, State and county governments, and the applicable parts of Section 13-5-42, HAR;
2. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the applicant shall be required to take measures to minimize or eliminate the



interference, nuisance, harm, or hazard within a time frame and manner prescribed by the Chairperson.

3. The applicant, its successors and assigns, shall indemnify and hold the State of Hawaii harmless from and against any loss, liability, claim or demand for property damage, personal injury or death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors and agents for any interference, nuisance, harm or hazard relating to or connected with the implementation of corrective measures to minimize or eliminate the interference, nuisance, harm or hazard;
4. The applicant shall comply with all applicable Department of Health administrative rules;
5. Before proceeding with any work authorized by the Board, the applicant shall submit four copies of the construction plans and specifications to the Chairperson or his authorized representative for approval for consistency with the conditions of the permit and the declarations set forth in the permit application. Three copies will be returned to the applicant. Plan approval by the Chairperson does not constitute approval required from other agencies;
6. Any work or construction to be done on the land shall be initiated within one year of the approval of such use, in accordance with construction plans that have been approved by the Department, and unless otherwise authorized, shall be completed within three years of the approval of such use. Further, the applicant shall notify the Department in writing prior to the initiation, and upon completion, of the project;
7. All mitigation measures set forth in the application materials, including responses to comments, and in the Final Environmental Assessment for this project are hereby incorporated as conditions of the permit;
8. The applicant shall utilize the exterior lighting recommended as described by the Division of Forestry and Wildlife;
9. The applicant understands and agrees that this permit does not convey any vested rights or exclusive privilege;
10. In issuing this permit, the Department and Board have relied on the information and data that the applicant has provided in connection with this permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete or inaccurate, this permit may be modified, suspended or revoked, in whole or in part, and/or the Department may, in addition, institute appropriate legal proceedings;
11. In the event that unrecorded historic remains (i.e., artifacts, or human skeletal remains) are inadvertently uncovered during construction or operations, all work shall cease in the vicinity and the applicant shall immediately contact the State Historic Preservation Division (692-8015);
12. Provisions for access, parking, safety signs and siting of equipment shall be provided;

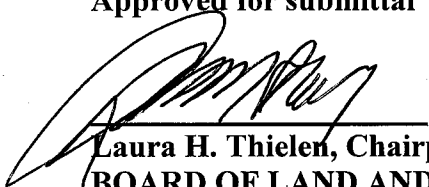
13. During construction, appropriate mitigation measures shall be implemented to minimize impacts to off-site roadways, utilities, and public facilities;
14. Other terms and conditions as may be prescribed by the Chairperson; and
15. Failure to comply with any of these conditions may render this Conservation District Use Permit null and void.

Respectfully submitted,

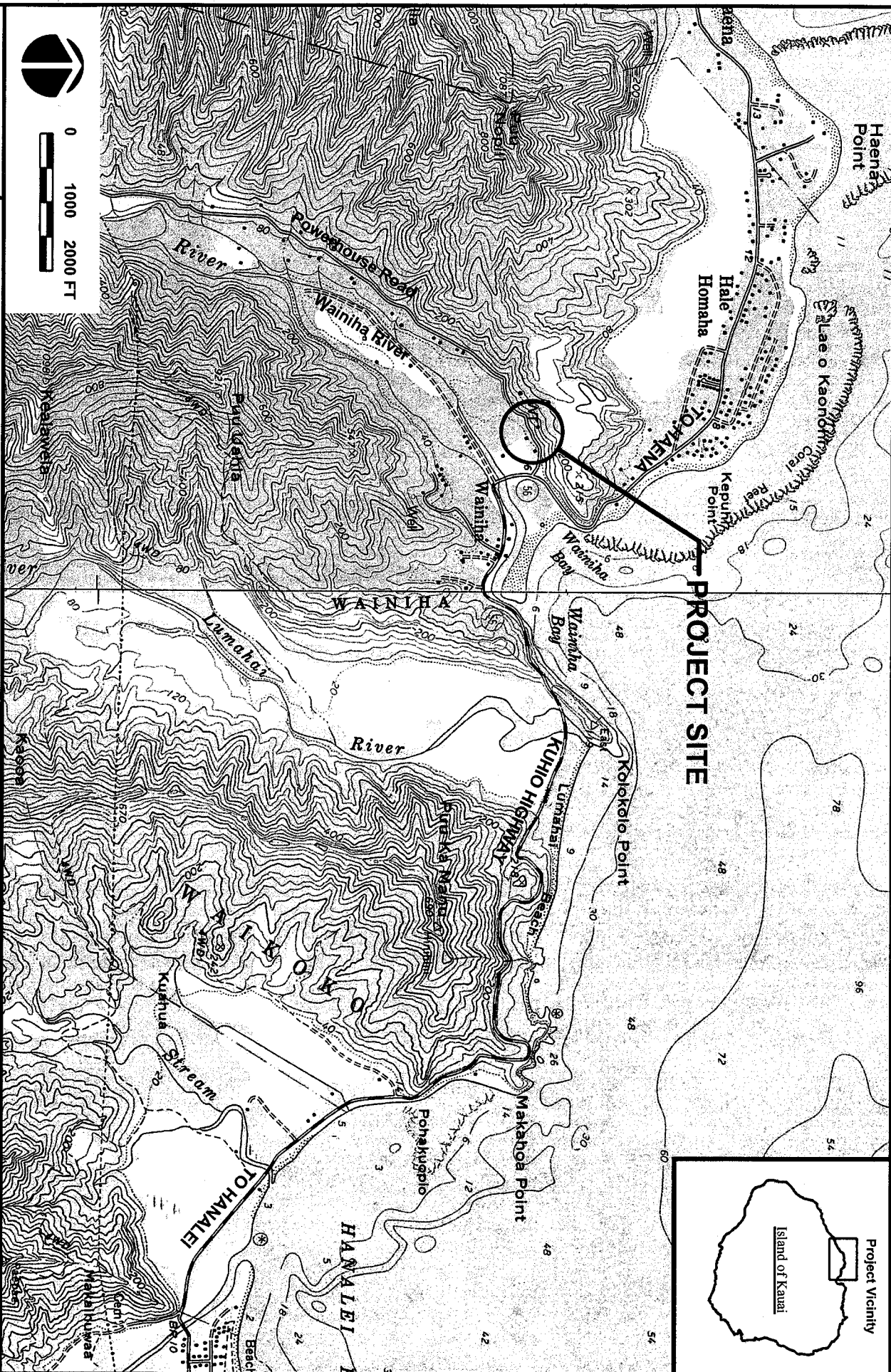


K. Tiger Mills, Staff Planner  
Office of Conservation and Coastal Lands

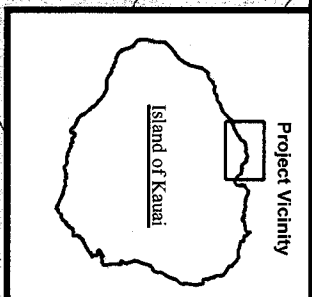
Approved for submittal



Laura H. Thielen, Chairperson  
**BOARD OF LAND AND NATURAL RESOURCES**



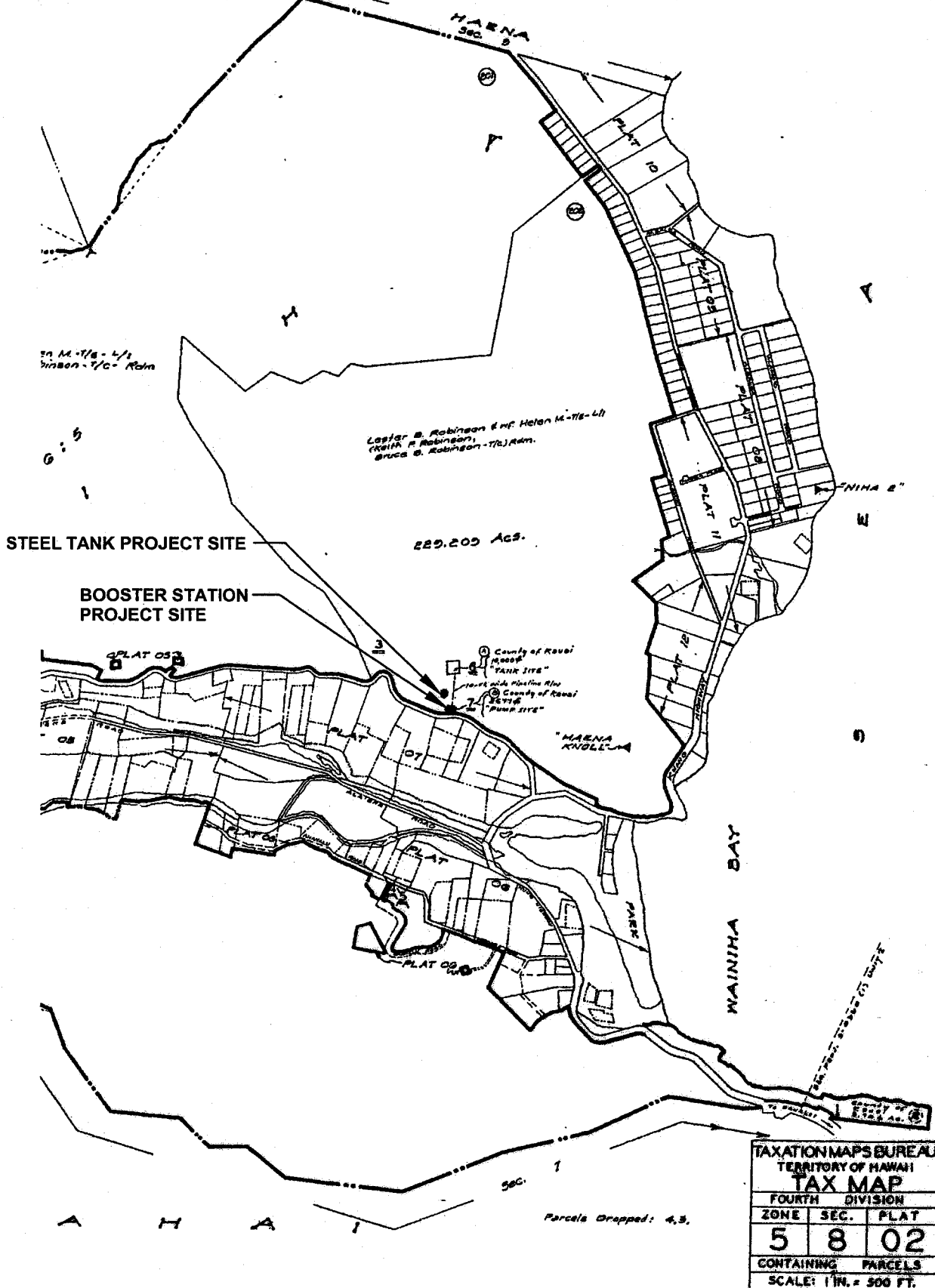
PROJECT SITE



**WILSON OKAMOTO CORPORATION**  
ENGINEERS • PLANNERS

WAINIHA BOOSTER PUMP STATION RENOVATION AND HAENA STEEL TANK RENOVATION

PROJECT LOCATION MAP



TAXATION MAPS BUREAU		
TERRITORY OF HAWAII		
TAX MAP		
FOURTH DIVISION		
ZONE	SEC.	PLAT
5	8	02
CONTAINING PARCELS		
SCALE: 1 IN. = 500 FT.		



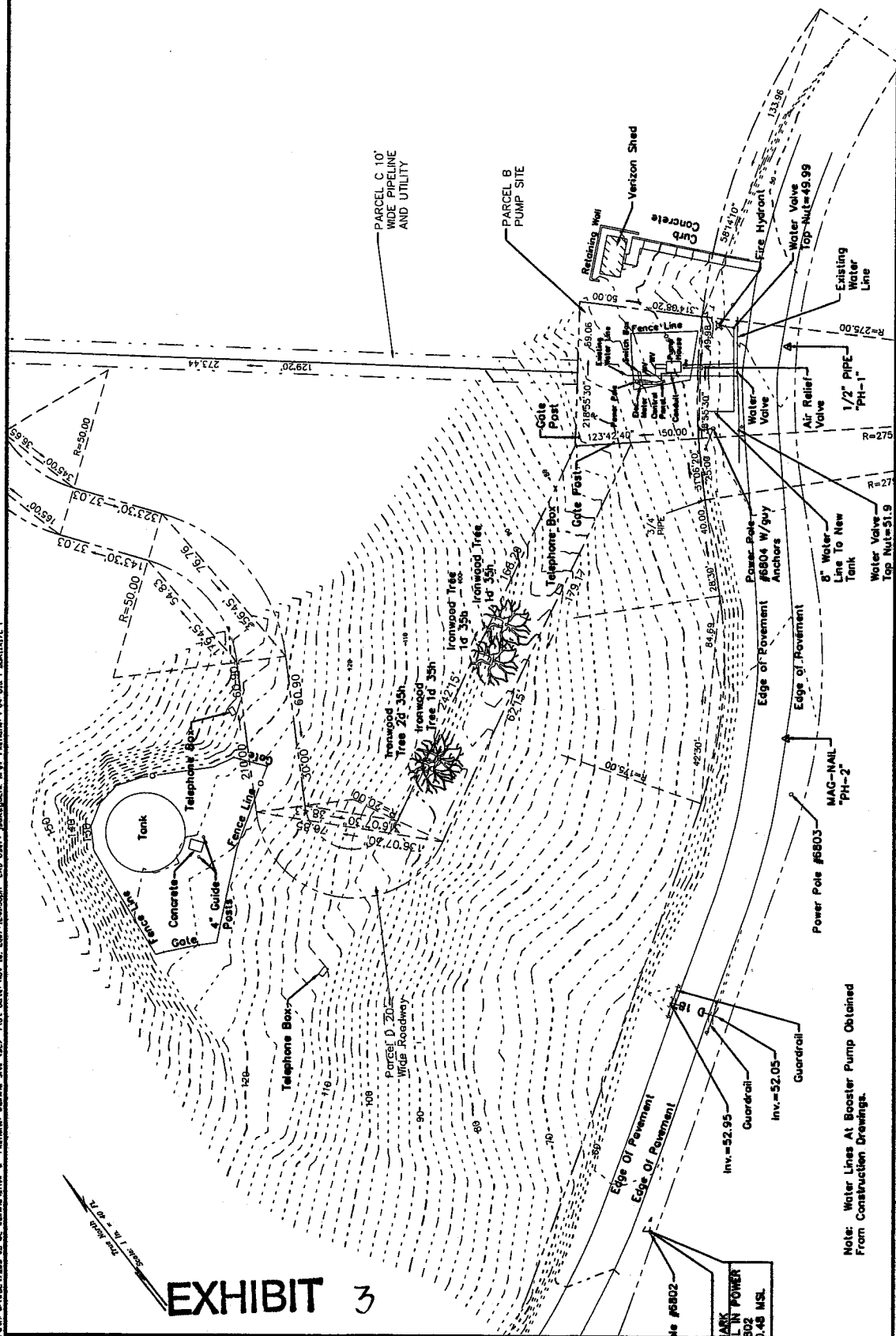
ENGINEERS • PLANNERS  
WILSON OKAMOTO  
CORPORATION

WAINIHA BOOSTER PUMP STATION RENOVATION  
AND HAENA STEEL TANK RENOVATION

TAX MAP KEY 5-8-02

EXHIBIT 2

Existing



**WAWAINIHA BOOSTER STATION RENOVATION AND HAENA STEEL TANK RENOVATION**

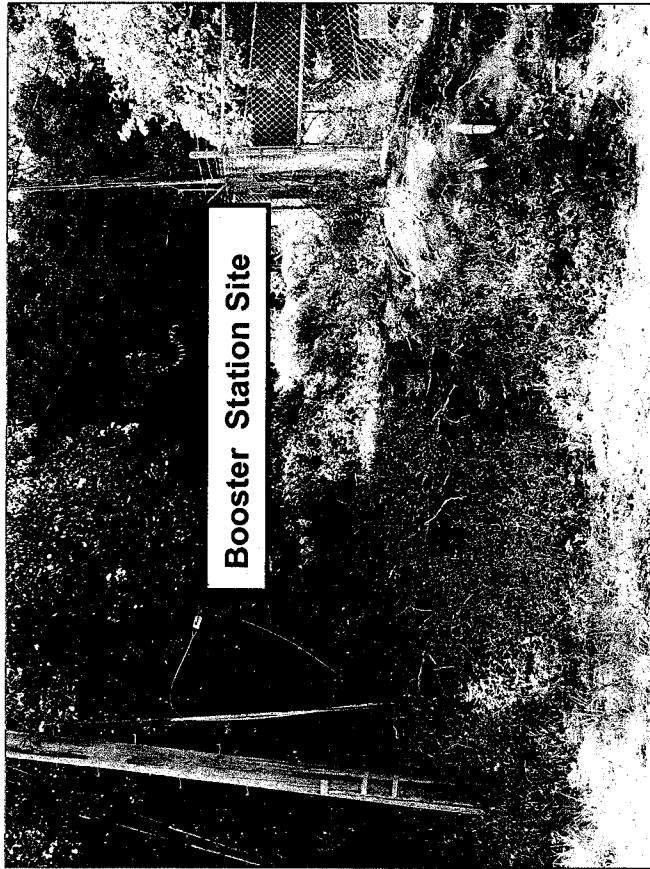
# PROJECT SITE TOPOGRAPHIC MAP

**Note: Water Lines At Booster Pump Obtained From Construction Drawings.**

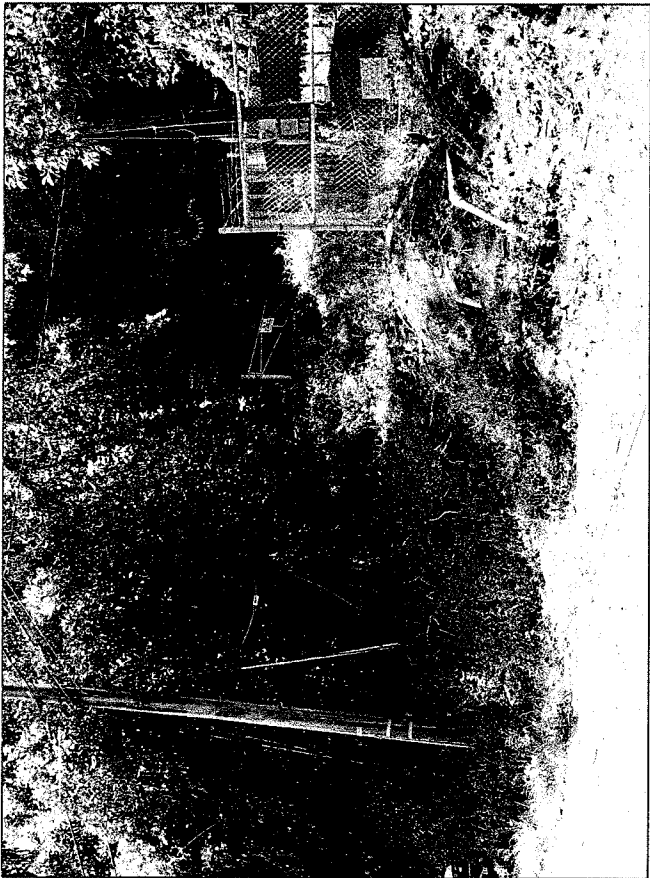
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**WILSON OKAMOTO  
& ASSOCIATES, INC.**

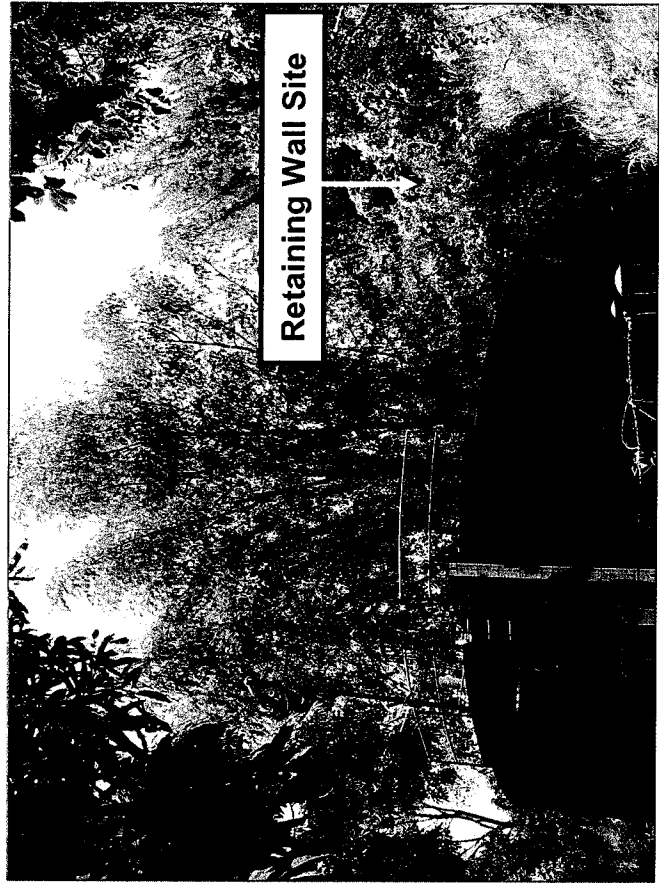
Existing



Booster Station project site along Wainiha Powerhouse Road

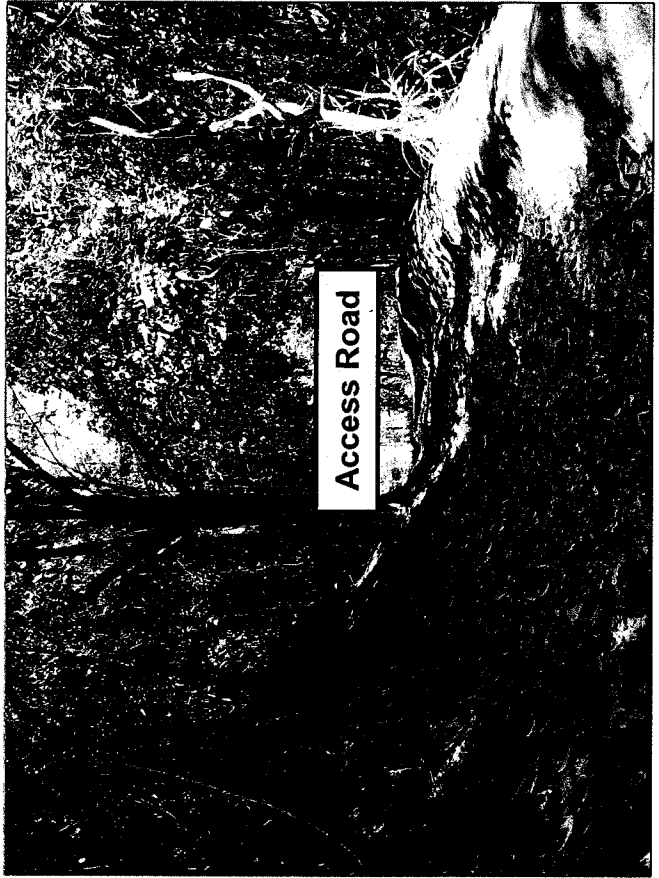


Booster Station project site along Wainiha Powerhouse Road



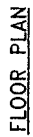
Haena Steel Tank project site































Project Site Photographs



Haena Steel Tank access road

- NOTES:**



LINE IN. 2 INCHES (IF NOT 2-INCHES APPROXIMATE)		                                	
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